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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,441	01/16/2004	Gary L. Byers	22-05-101	7842

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Carl G. Dowrey
DOWREY RICKARDS PLLC
Suite 106
19119 Northcreek Parkway
Bothell, WA 98011

EXAMINER

COTTINGHAM, JOHN R

ART UNIT	PAPER NUMBER
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2116

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/759,441

Applicant(s)

BYERS, GARY L.

Examiner

John R. Cottingham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Wittman et al. U.S. Patent 3,059,952. Wittman et al. shows all of the claimed subject matter of a connector in Figures 1-6.

Regarding claim 1, a connector for connecting a structural member to a boss 13 on a base anchor element 12, said boss 13 having a through bore, said connector comprising; a semi-rigid shaft portion 19 removably received in said bore, stop means 14 for limiting travel of the shaft in one direction through the bore, a terminal end 25 spaced from said shaft for connection to said structural member 27, and a reduced cross sectional extent located between said shaft and said terminal end 25, said connector being of integral construction, said reduced cross sectional extent forming a living hinge between the shaft and the terminal connector 25.

Regarding claim 2, wherein said connector is comprised of semi-rigid molded plastic material (see cross hatching), and said structural member comprises a hollow tubular elastic strap 27, said strap passing over said terminal end 25 to tightly grip the surface thereof.

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Regarding claim 3, A restraining device comprising in combination: a restraining member having opposite terminal ends, a base member 12 for connection to the opposite ends of said restraining member, each said base member 12 including means for attachment to a surface on one face and a protruding boss 13 on the opposite face thereof said boss 13 including a through bore, and a connector pin 19 removably received in said bore for connection to a terminal end 25 of said restraining device 27, said connector pin 19 including a shaft portion 15 removably received in said bore, stop means 14 for limiting travel of the shaft in one direction through the bore, a terminal connector 25 on said pin 19 spaced from said shaft for connection to said restraining member 27, and a reduced cross sectional extent located between said shaft and said terminal connector, said connector pin 19 being of integral construction, said reduced cross sectional extent forming a living hinge between the shaft and the terminal connector.

Regarding claim 4, a flexible strap restraining device comprising in combination: a hollow tubular elastic strap 27 having opposite terminal ends, base members 12 for connection to the opposite ends of said strap, each said base member including means 12 for attachment to a surface on one face and an upstanding boss 13 on the opposite face thereof, said boss 13 including a through bore, and a connector pin 19 removably received in said bore for connection to said strap 27, said connector pin 19 including an enlarged head 14 on one end engaging said boss 13 to limit the travel of the pin in the bore, a shaft section extending through said bore, a terminal connector on the other end thereof and a reduced cross sectional extent forming a flexible hinge located between

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said shaft and said terminal connector, the terminal end of said strap 27 passing over said terminal connector 25 in a snug fit for gripping action, whereby the gripping action of said strap terminal end is enhanced upon tensioning said elastic strap and said terminal connectors are movable about said flexible hinge.

Regarding claim 5, wherein; said terminal connector has a right circular cylindrical surface, and said flexible strap 27 comprises a hollow elastic tubular member having an inside diameter sized for snugly engaging said tubular connector to grip the surface thereof.

Regarding claim 6, wherein; said connector pin 19 comprises a semi-rigid unitary molded plastic body (see cross hatching).

Regarding claim 7, wherein; said base members comprise suction cups 12, said boss 13 being formed on the surface of said opposite face.

Regarding claim 8, a flexible strap restraining device comprising in combination: a hollow tubular elastic strap 27 having opposite ends for connection to base members 12, suction cup base members 12 for connection to the opposite ends of said strap and attachment to smooth impermeable surfaces, each said suction cup base member 12 including a vacuum retaining cavity on one face and an upstanding boss 13 on the opposite face thereof, said boss 13 including a central longitudinal axis extending normal to said cavity and a through bore extending normal to said longitudinal axis, and a semi-rigid plastic connector pin 19 removably received in said bore for connection to said strap, said connector pin 19 including an enlarged head 14 on one end engaging said boss to limit the travel of the pin in the bore, a shaft section extending through said

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bore, a terminal connector 25 on the other end thereof and a reduced cross sectional extent forming a flexible hinge located between said shaft and said terminal connector, the terminal end of said strap 27 passing over said terminal connector in a snug fit for gripping action, whereby the gripping action of said strap terminal end is enhanced upon tensioning said elastic strap 27 and said terminal connectors are movable about said flexible hinge.

Regarding claim 9, wherein; said terminal connector has a right circular cylindrical surface, and said flexible strap 27 has an inside diameter sized for snugly engaging the cylindrical surface of said terminal connector.

Regarding claim 10, wherein; said connector pin 19 comprises a semi-rigid unitary molded plastic body.

Regarding claim 11, a connector for connecting a structural member to a boss 13 on a base anchor element, said boss 13 having a transverse through bore, said connector comprising; a semi-rigid shaft portion removably received in said bore, stop means on said shaft 19 for limiting travel of the shaft in one direction through the bore, a terminal end connector portion spaced from said shaft for connection to said structural member, and a flexible reduced cross sectional extent located between said shaft portion and said terminal end connector portion 14, said connector being of integral construction, said flexible reduced cross sectional extent forming a living hinge between the shaft portion and the terminal end connector portion for transmitting multi-directional loads to said shaft portion.

Regarding claim 12, wherein said connector is comprised of semi-rigid molded plastic material, and said structural member comprises a hollow tubular elastic strap 10, said strap passing over said terminal end connector portion to tightly grip the surface thereof under tensile loading.

Regarding claim 13, a connector for connecting a structural member to a boss 13 on a base anchor element 12, said boss 13 protruding from the base anchor element and having a longitudinal axis, a bore extending through said boss in a direction transverse to said longitudinal axis, said connector comprising; a semi-rigid shaft portion 19 removably received in said bore, stop means on said shaft for engaging said boss to limit travel of the shaft in one direction transversely through the bore, a terminal end connector portion spaced from said shaft; portion and said boss for connection to said structural member, and a flexible reduced cross sectional extent on said connector located outside said bore and between said shaft portion and said terminal end connector portion, said connector being of integral construction, said reduced cross sectional extent forming a living hinge between the shaft and the terminal end connector portion for transmitting multi- directional tensile loads to said shaft portion.

Response to Arguments

Applicant's arguments filed 10/15/04 have been fully considered but they are not persuasive. Applicant argues that four pieces of the connector are integral construction however, the term "integral" does not require a unitary one-piece structure. In re Kohno, 391 F.2d 959, 157 USPQ 275 (CCPA 1968); In re Larson, 340 F.2d 965, 144 USPQ 347 (CCPA 1965).

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R. Cottingham whose telephone number is (571) 272-7079. The examiner can normally be reached on Monday - Thursday, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571)272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John R. Cottingham
Primary Examiner
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jrc